

#### BEFORE THE ARIZONA CORPORATION COMMISSION 1 LEA MÁRQUEZ PETERSON 2 Chairwoman Arizona Corporation Commission 3 SANDRA D. KENNEDY DOCKETED Commissioner 4 JUSTIN OLSON NOV -9 2021 Commissioner 5 ANNA TOVAR Commissioner DOCKETEN 6 JIM O'CONNOR Commissioner 7 DOCKET NO. T-00000A-21-0187 APPLICATION OF THE NORTH 8 AMERICAN NUMBERING PLAN 78311 DECISION NO. ADMINISTRATOR, ON BEHALF OF THE 9 ARIZONA TELECOMMUNICATIONS ORDER INDUSTRY, FOR RELIEF OF THE 480 10 NUMBERING PLAN AREA. 11 12 13 Open Meeting October 26 and 27, 2021 14 Phoenix, Arizona 15 BY THE COMMISSION: 16 FINDINGS OF FACT BACKGROUND 17 On June 8, 2021, the North American Numbering Plan Administrator ("NANPA") 18 1. filed an application ("Application") with the Arizona Corporation Commission ("Commission") on 19 behalf of the Arizona telecommunications industry ("Industry")1 requesting the Commission 20 21 approve the Industry consensus to recommend to the Commission a Numbering Plan Area ("NPA") Boundary Elimination Overlay as the plan for relief for the pending exhaust of numbering resources 22 23 for the 480 NPA or Area Code. Per Title 47 of the Code of Federal Regulations, Section 52.19, the Federal Communications Commission ("FCC") delegated authority to the states to review and 24 25 26 27 <sup>1</sup> The Industry is composed of current and prospective telecommunications carriers operating in, or considering 28

operations within, the 480, 602, and 623 NPAs.

In 1999, the Phoenix rate center<sup>3</sup> was split from the 602 NPA into three NPAs,

Due to numbering resource demands, the 480 NPA is projected to exhaust its supply

creating the 480 and 623 NPAs. The 480 NPA serves the southcentral area of Arizona including,

but not limited to, a portion of the City of Phoenix, Chandler, Gilbert, Mesa, Tempe, Scottsdale, and

Sun Lakes in the counties of Maricopa and Pinal. The 602 NPA borders the west side of the 480

NPA, serves the majority of the City of Phoenix as well as, but not limited to, a portion of the City

of Glendale, and the communities of Cave Creek and Ahwatukee. The 623 NPA borders the west

and north sides of the 602 NPA, the west side of the 480 NPA and also serves the areas of, but not

limited to, the City of Glendale and the communities of Avondale, Tolleson, Buckeye, Sun City and

of Central Office Codes ("Codes" or "NXXs") by the first quarter of 2024. Because the 480 NPA is

within 36 months of this projected exhaust, according to NPA Code Relief Planning and Notification

Guidelines ("Guidelines"), NANPA convened an Industry relief meeting on April 28, 2021. The

meeting attendees discussed the relief alternatives and reached a consensus to recommend to the

New River. An Arizona area code map is included as Attachment 1.

Commission a Boundary Elimination Overlay as the proposed form of relief.

approve NPA relief plans.<sup>2</sup> The Application requests a Commission decision no later than January

14, 2022.

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STAFF ANALYSIS

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19 Relief Alternatives

# **Boundary Elimination Overlay**

4. A Boundary Elimination Overlay is a form of NPA relief in which the boundary between existing non-exhausting NPAs and the exhausting NPA is eliminated such that all of the area codes serve the same geographic area, forming an overlay over each other. The boundary elimination in this case would result in the boundaries between the 480, 602 and 623 NPAs being

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<sup>2</sup> See <a href="https://ecfr.federalregister.gov/current/title-47/chapter-I/subchapter-B/part-52/subpart-B/section-52.19">https://ecfr.federalregister.gov/current/title-47/chapter-I/subchapter-B/part-52/subpart-B/section-52.19</a>

<sup>&</sup>lt;sup>3</sup> A rate center is a geographical area used to determine the boundaries for local calling, billing, and assigning specific phone numbers, which can encompass multiple area codes.

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removed, and would require 10-digit dialing within and between the affected area codes. Listed below are the advantages/challenges.

Advantages for the Boundary Elimination Overlay include:

- It eliminates the need to open a new NPA for the 480 NPA area.
- As the 602 NPA is projected to exhaust in the second quarter of 2026, thus kicking off another round of relief planning in the second quarter of 2023, this option would eliminate that need along with the need to open an additional NPA for the 602 NPA area.
- It does not require existing customers to change their area code/phone number.
- It removes the 3-way split of the Phoenix rate center, making it one rate center again.
- As the boundary elimination will require 10-digit dialing for 602 and 623 NPAs, and the FCC's requirement for 10-digit dialing for the National Suicide Hotline implementation of the 988 3-digit code requires the 480, 520 and 928 NPAs to transition to 10-digit dialing, it creates a consistent 10-digit dialing plan across the entire State of Arizona. 4
- It is a more efficient use of resources.

Challenges for the Boundary Elimination Overlay include:

- Boundary Elimination Overlay alternatives generally have a shorter projected life than the All Services Distributed Overlay because no new NPA is added. In this case, and as discussed in further detail below, it is a difference of nine years.
- It impacts a larger quantity of customers than the All Services Distributed Overlay for only the 480 NPA.

<sup>&</sup>lt;sup>4</sup> See In the Matter of Implementation of the National Suicide Hotline Improvement Act of 2018, WC Docket No. 18-336, released July 17, 2020.

 It requires customers in the 602 and 623 NPAs to dial 10-digits where otherwise, based on current exhaust projections, customers wouldn't be subjected to NPA Relief and 10-digit dialing for another five years for the 602 NPA and 48 years for the 623 NPA.

• The loss of the ability to associate an area code with a unique geographic area.

### **All Services Distributed Overlay**

5. Another form of relief available for the 480 NPA exhaust scenario is an All Services Distributed Overlay in which a new NPA code would be assigned to the same geographic area as the exhausting NPA. New customers would receive a phone number that included the new area code and 10-digit local dialing by all customers within and between the NPAs in the affected area would be required.

Advantages for an All Services Distributed Overlay include:

- Existing customers would retain their current telephone numbers.
- As discussed below, the projected life of the new overlay area code would be nine years longer than the combined projected life of the Boundary Elimination Overlay.

Challenges for an All Services Distributed Overlay include:

- The loss of the ability to associate an area code with a unique geographic area.
- Consumer confusion may arise from different area codes being assigned in the same home, business, or neighborhood.

### Geographic Split

6. A third form of relief traditionally available in exhaust situations is the geographic split alternative, in which one part of the affected area retains the current NPA, the remaining portion of the affected area is assigned a new NPA, and 7-digit dialing remains in effect. However, this option is not available for the 480 NPA exhaust scenario as the 480 NPA is scheduled to transition to mandatory, 10-digit local dialing, due to the current national implementation of the 988 abbreviated code for the National Suicide Prevention Lifeline per FCC requirements. Therefore, only an overlay will meet the requirements for relief.

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# Industry Position

- 7. The Application states that as the 480 NPA is within 36 months of projected exhaust, NANPA convened and hosted an Industry relief meeting on April 28, 2021. After discussion regarding the reason for the meeting, the two relief alternatives available and the various advantages/challenges of each, a consensus was reached by the participants that the Boundary Elimination Overlay is the desired outcome for the reasons listed previously.
- 8. Additional consensus was also reached on a consistent 10-digit dialing plan across the three affected NPAs, the appropriate technical and customer education implementation milestones, and a 13-month implementation interval for the Boundary Elimination Overlay.

## Additional Relief Considerations

- 9. In making its decision regarding the appropriate relief plan for the 480-area code, the Commission may take into account the following considerations. First, the plan selected should maximize the time frame before another NPA relief action is necessary. Second, the plan should minimize the total costs to all affected parties. Third, the relief option chosen should be the least confusing and minimize the impact to customers. Additional information on each of the considerations for selecting an appropriate relief plan for the 480 Area Code follows.
- of at least five years beyond the predicted date of exhaust and that customers who undergo number changes not be required to change again for a period of eight to 10 years. Both alternatives considered here are consistent with this criterion as, according to NANPA's exhaust calculations, the projected life of the new All Services Distributed Overlay area code would be 35 years and combined projected life of the Boundary Elimination Overlay area codes would be 26 years.

### Minimizes Costs to Both Consumers and the Industry

11. Either method of NPA relief will come with some sort of cost to the Industry and consumers. With a 10-digit dialing requirement, should a business phone number be currently marketed using only seven digits, the costs to the business may include changing vehicle markings, stationery, and other printed material, promotional materials, and anything else that displays the

company's telephone number. Other costs that may be incurred would include reprogramming of such items as customer premises equipment and alarm systems.

12. Service providers may incur costs having to update their tariffs, billing, routing translations, 911 databases, and directory assistance and central office switch database systems. Costs will also be incurred carrying out public notification/education requirements. Additionally, both residential and business customers would have to revise speed-dial lists with the full 10-digits of a telephone number contained in the lists.

### **Minimizes Confusion and Impact to Consumers**

- 13. The other factor relates to the adverse impacts to consumers under both relief methods. The impact caused by changes in telephone numbers affect not only customers located in the current 480 NPA, and potentially the 602 and 623 NPAs as well, but these changes also affect callers in other parts of the state and country who place calls to the affected area.
- 14. Both Overlay scenarios presented do not require any existing customers to change their telephone numbers. However, some confusion may be created by having different area codes in the same neighborhood, residence, or business location. An Overlay's mandatory 10-digit dialing for local calls could prove challenging for the elderly who rely primarily on a traditional wireline phone. However, Staff believes that the overall impact from either overlay scenario will be mitigated by the widespread use of wireless handset 10-digit dialing.

## Implementation Considerations

#### Schedule

- 15. In its Application, NANPA included a 13-month Implementation Schedule for the proposed Boundary Elimination Overlay with the goal of completing this schedule six months in advance of the projected exhaust period for the 480 NPA. The Application states that the Boundary Elimination Overlay implementation schedule would commence following the completion of the implementation of the mandatory 10-digit dialing in the 480 NPA due to the National Suicide Hotline 988 dialing code project. This project is scheduled to complete July 15, 2022.
- 16. Given the preceding, the schedule looks approximately as follows, should current numbering resource demand stay consistent and not accelerate.

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Commission Decision (No later than)	January, 2022	
End of 988 Suicide Hotline dialing code project	July, 2022	
Six Month Overlay Customer Education and	August, 2022	
Network Preparation Period Begins		
Six Month Permissive 10-digit Dialing <sup>5</sup> and	February, 2023	
Continued Customer Education Period Begins.		
Mandatory 10-digit dialing starts at the end of		
this period.		
Overlay Effective Date	August, 2023	
Current Projected 480 Exhaust Date	1st Quarter, 2024	

17. Should the Commission decide to order an All Services Distributed Overlay, an alternative timeframe would have to be determined by the Industry based on the complexity of the project, other parallel project demands, and would be decided at the initial implementation meeting.

18. The Application includes a request that the Industry be allowed to select the specific implementation dates after a Commission order is issued that do not interfere with holidays, high traffic days, network freeze periods or dates that conflict with other overlay implementation periods in other parts of the country.

### **Future Numbering Allocation**

- 19. On August 16, 2021, Staff requested from the NPA Relief Planner for Arizona an updated quantity of NXX codes available for assignment in the 480 and 602 NPAs. There were 52 NXX codes available for the 480 NPA and 69 NXX codes for the 602 NPA. NXX code assignments for the 480 NPA were averaging 1.76 codes per month and 1.53 for the 602 NPA.
- 20. Staff recommends that numbering resource usage be closely monitored, as a spike in usage could make it necessary for NANPA to declare the 480 or 602 NPA in jeopardy. A jeopardy situation indicates that the forecasted and/or actual demand for NXX codes will exceed the known supply during the planning/implementation interval for NPA relief.

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<sup>&</sup>lt;sup>4</sup>Permissive dialing is the ability to complete phone calls in an area with a new area code by dialing either seven digits or ten digits. This would apply only to the 602 and 623 area codes if the Boundary Elimination Overlay option is selected for a period of six months.

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In general, during a jeopardy situation, after immediately implementing standard 21. interim number conservation procedures, NANPA convenes an Industry meeting to obtain Industry consensus on a method of numbering allocation until relief can be put into place. Staff recommends that the Commission require prior notification to Staff by NANPA before any declaration of jeopardy in the 480 or 602 area codes and before any new allocation procedure is implemented.

#### **Consumer Education**

- 22. During either Overlay implementation period, carriers will be the party primarily responsible for customer education. Staff believes that customer education is a key element in the successful implementation of a relief plan. Therefore, Staff recommends that the Commission require all telecommunications providers providing service in the 480, 602, and 623 area codes, including those providing service using Voice over Internet Protocol, resellers, and any other companies providing phone numbers to customers, to provide area code relief customer education material to their customers. In addition, copies of the area code relief customer education material should be filed in this docket 30 days prior to the completion of any customer education milestone.
- Additionally, Staff will update the Commission "All About Area Codes" 23. (http://azcc.gov/utilities/telephone/all-about-area-codes) web page with information about the selected 480 relief option.

#### RECOMMENDATIONS

- Upon examination of the Application for NPA relief for the 480 NPA filed by 24. NANPA on behalf of the Industry, Staff recommends the following:
  - 1. The Commission adopt the proposed Industry consensus recommended Boundary Elimination Overlay Plan for relief for the reasons set forth above.
  - If the Commission adopts the proposed Boundary Elimination Overlay Plan 2. implementation schedule set out above, permit the Industry to select the specific implementation dates, and order NANPA to file the agreed upon specific timeline on behalf of the Industry in this Docket 90 days from the date of the Commission order adopting the Boundary Elimination Overlay Plan.

3.	If the Commission selects instead the All Services Distributed Overlay, the			
	Commission should require the Industry to develop a new proposed			
	implementation schedule within 90 days of the Commission's order in this			
	matter.			

4. The Commission should require all telecommunications providers providing service in the 480, 602, and 623 area codes, including those providing service using Voice over Internet Protocol, resellers, and any other companies providing phone numbers to customers, to provide area code relief customer education material to their customers. In addition, copies of the area code relief customer education material should be filed in this docket 30 days prior to the completion of any customer education milestone.

#### CONCLUSIONS OF LAW

- 1. The Commission has jurisdiction over the subject matter of this investigation.
- 2. The recitals of Findings of Fact set forth above are supported by the record.
- 3. The record in this proceeding supports adoption of a Boundary Elimination Overlay and Staff Recommendations are reasonable, fair and equitable and therefore in the public interest.

#### ORDER

IT IS THEREFORE ORDERED that the proposed Boundary Elimination Overlay relief plan involving the 480, 602 and 623 area codes is hereby adopted.

IT IS FURTHER ORDERED that the proposed implementation schedule is hereby adopted, the Industry shall select the specific implementation dates, and NANPA shall then file the agreed upon specific timeline on behalf of the Industry in this docket no later than 90 days from the date of this Order.

IT IS FURTHUR ORDERED that all telecommunications providers providing service in the 480, 602, and 623 area codes, including those providing service using Voice over Internet Protocol, resellers, and any other companies providing phone numbers to customers, to provide area code relief customer education material to their customers. In addition, copies of the area code relief

Page 10 Docket No. T-00000A-21-0187 customer education material should be filed in this docket 30 days prior to the completion of any customer education milestone. Decision No. 

IT IS FURTHER ORDERED that NANPA shall notify Commission Staff at least 30 days before any planned declaration of jeopardy in the 480 or 602 area codes and implementation of a new allocation procedure.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

COMMISSIONER OLSON

COMMISSIONER TOVAR

COMMISSIONER O'CONNOR



IN WITNESS WHEREOF, I, MATTHEW J. NEUBERT, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this day of Y 2021.

W J. NEUBERT EXECUTIVE DIRECTOR

DISSENT:		

DISSENT:

EOA:MAC:cj/MAS

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Page 12 Docket No. T-00000A-21-0187 **ACC-Telecommunications** Docket No. T-00000A-21-0187 Kimberly Wheeler Miller North American Numbering Plan Administrator 2411 Dulles Corner Park, Suite 250 Herndon, Virginia 20171 Robin Mitchell Director/Chief Counsel, Legal Division Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007 legaldiv@azcc.gov utildivservicebyemail@azcc.gov Consented to Service by Email Decision No. 78311